

ABSTRACT

A method and apparatus for compensating, in the electrical domain, for chromatic dispersion of an optical signal is disclosed. A received optical signal is converted to an electrical signal. The spectrum of the electrical signal is amplified by a factor derived from its frequency; and the phase of regions of said spectrum is selectively inverted to thereby allow recovery of the transmitted data.

The optical signal may have a non-infinite extinction ratio to improve recovery of the transmitted signal. The square root of the electrical signal may be taken to improve recovery of the transmitted signal